

WHAT IS CLAIMED IS:

1. An air filter comprising an essentially metal-free filter insert with a filter medium which forms a hollow cylinder, and end disks arranged on the axial end faces of the filter medium of the filter insert, wherein one end disk forms a closed end of the filter element and has a handle element extending axially away from the filter element, and the other end disk is constructed as a hollow cylinder and comprises a concentric, radially-acting, resilient gasket.
2. An air filter according to claim 1, wherein said filter is an air filter for cleaning combustion air for an internal combustion engine.
3. An air filter according to claim 1, wherein the filter medium is pleated, and at least the end disk with the handle element is made of a thermoplastic synthetic resin material.
4. An air filter according to claim 1, wherein the filter insert further comprises a concentric supporting body adjacent the inside or outside of the cylindrical filter medium.
5. An air filter according to claim 1, wherein the hollow cylindrical end disk has a hollow cylindrical, concentric and axially extending collar.
6. An air filter according to claim 5, wherein said collar is connected by reinforcing ribs to the end disk.
7. An air filter according to claim 5, wherein the hollow cylindrical collar has an outer circumferential groove in which a gasket having a radially outwardly protruding lip is arranged.

8. An air filter according to claim 1, wherein the filter insert is sealingly connectable via the radial gasket to a connecting profile in the form of a circular ring, the axial end of the collar being bounded axially by a stop through the connecting profile, and a secondary filter element being sealingly connectable to the filter insert via the connecting profile.

9. A secondary filter element for an air filter, said secondary filter element comprising an essentially metal-free filter insert with a filter medium which forms a hollow cylinder and end disks arranged on axial end faces of the cylindrical filter medium, wherein the one end disk forms a closed end of the filter element and the other end disk has a hollow cylindrical construction and carries a concentric handle element extending axially away from the filter element and a concentric, radially-acting, resilient gasket.

10. A secondary filter element according to claim 9, wherein the secondary element is connectable via the radial gasket to a connecting profile in the form of a circular ring to form a seal, and wherein the concentric handle element has a smaller outside diameter than the inside diameter of an annular collar of a main filter element and engages in said collar so that the secondary filter element and the main filter element are mutually centered relative to each other.

11. A secondary filter element according to 9, wherein the filter medium is a nonwoven filter web, and at least one end disk is made of a thermoplastic synthetic resin material.

12. A secondary element according to claim 9, wherein the handle element has the shape of a collar provided with passages, and wherein said collar is provided with an outer circumferential groove in which the radially acting gasket is received, said radially acting gasket comprising an outwardly protruding radial lip.